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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/807,373

03/24/2004

Satoshi Arakawa

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02/06/2006

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EXAMINER

ROSENBERGER, FREDERICK F

ART UNIT

PAPER NUMBER

2884

DATE MAILED: 02/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/807,373	ARAKAWA, SATOSHI	
	<b>Examiner</b>	<b>Art Unit</b>	
	Frederick F. Rosenberger	2884	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 23 November 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. Applicant's replies, filed 1 September 2005 and 23 November 2005, has been received and entered. Accordingly, changes have been made to the specification. Claims 1 and 2 have been amended. No new claims have been added. Thus, claims 1 and 2 are currently pending in this application.
2. The drawings were received on 13 October 2005. These drawings are acceptable.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reinstein et al. (US Patent # 6,626,569) in view of Jang et al. (US Patent # 5,892,840).

Reinstein et al. disclose a quality assurance system for use with a medical linear accelerator comprising:

A radiation image reading means in the form of digitizer **60** (Figure 1) for reading the image from an exposed X-ray film into a computer **20** (column 7, lines 5-16);

And a relative position obtaining means, in the form of image processing software in computer **20**, which compares the markings in the image to determine the alignment of a positioning light field and corresponding X-ray radiation, among other device parameters (column 2, line 54 – column 3, line 9; column 6, lines 24-43; column 8, lines 4-27; column 10, line 3 – column 11, line 16).

Reinstein et al. are silent with regards to the radiation image reading means reading out a radiation image from a stimuable phosphor sheet. Instead, Reinstein et al. choose to work with radiographic film or an electronic portal imaging device (column 6, lines 10-15).

However, the use of stimuable phosphors is well known in the art. For example, Jang et al. disclose the use of a storage phosphor panels (i.e. stimuable phosphor panels) in place of radiographic film in determining the X-ray beam parameters of a radiographic system. Jang et al. points out that the use of stimuable phosphors is preferred over radiographic film because of a wider exposure latitude and the opportunity for electronic processing, storage, and transmission of images. Thus, it would have been obvious for a person having ordinary skill in the art at the time the invention was made to employ a radiation image reading means for reading out the image from a stimuable phosphor instead of a radiographic film so as to take advantage of the wider exposure latitude and electronic processing, storage and transmission opportunities afforded by a stimuable phosphor, as taught by Jang et al.

The combination of Reinstein et al. and Jang et al. disclose a quality control system for an irradiation apparatus comprising both a radiation image reading means capable of reading out an image from a stimuable phosphor and a relative position obtaining means for obtaining a relation between a position check light field and the irradiation field through image analysis. The limitations associated with the irradiation processing steps of the phosphor panel do not affect the structure of the radiation image reading means or the relative position obtaining means. "Expressions relating the apparatus to contents thereof during an intended operation are of no significance in determining the patentability of the apparatus claim." Ex parte Thibault, 164 USPQ 666, 667 (Bd. App. 1969). Furthermore, "[i]nclusion of material or article worked upon by a structure being claimed does not impart patentability to the claims." In re Young, 75 F.2d 996, 25 USPQ 69 (CCPA 1935) (as restated in In re Otto, 312 F.2d 937, 136 USPQ 458, 459 (CCPA 1963)). See MPEP § 2115.

#### ***Allowable Subject Matter***

5. The indicated allowability of claims 1 and 2 is withdrawn in view of the newly discovered reference(s) to Jang et al. Rejections based on the newly cited reference(s) follow.

#### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. McNeirney et al. (US Patent # 6,267,502) discloses an alignment

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verification system for determining alignment between a light field and an X-ray field through image analysis. Whiting (US Patent # 4,837,436) discloses a typical storage phosphor read-out unit.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frederick F. Rosenberger whose telephone number is 571-272-6107. The examiner can normally be reached on Monday-Friday 8:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Porta can be reached on 571-272-2444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Frederick F. Rosenberger  
Patent Examiner  
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